

PATENT APPLICATION

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GAS DISTRIBUTION SHOWERHEAD

DESCRIPTION OF REFERENCE NUMERALS ON THE DRAWINGS

10	100	apparatus for performing high temperature CVD
	102	wafer
	104	wafer support structure
	105	deposition chamber
	106	gas distribution showerhead
15	Y	showerhead-to-wafer gap
	108	process gas inlet
	110	blocker plate
	112	apertures
	114	gas distribution face plate
20	114a	backside of face plate 114
	116	holes
	118	layer of deposited material
	120	incoming process gas stream
	200	wafer
25	202	semiconductor structures
	204	STI structures
	300	apparatus for chemical vapor distribution
	302	wafer
	304	wafer support structure
30	306	deposition chamber
	308	gas distribution showerhead
	Y'	showerhead-to-wafer gap
	310	process gas inlet
	312	blocker plate
35	314	apertures

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DESCRIPTION OF REFERENCE NUMERALS ON THE DRAWINGS (CONT'D)

316 gas distribution face plate
316a gas inlet side of gas distribution faceplace
316b gas outlet side of gas distribution faceplate
318 aperture
5 318a discrete hole
318b elongated slot
L length of elongated slot
600 material deposited from the conventional holes
602 material deposited through the elongated slots
10 650 composite showerhead
652 first region
654 conventional holes
656 second region
658 elongated slots
15 760 face plate outlet portion
762 non-continuous slots
764 face plate
766 non-continuous slots
768 face plate
20 770 slots
772 face plate
774 non-continuous slots
776 conventional holes
900 chemical vapor deposition apparatus
25 902 wafer
904 wafer support structure
906 deposition chamber

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DESCRIPTION OF REFERENCE NUMERALS ON THE DRAWINGS (CONT'D)

	908	gas distribution showerhead
	Y''	showerhead-to-wafer gap
	912	process gas inlet
	914	blocker plate
5	916	apertures
	918	gas distribution face plate
	918a	edge portion of face plate
	918b	center portion of face plate
	920	holes
10	A	taper angle
	1500	conventional gas distribution faceplate
	1500a	orifices
	1501	gas distribution faceplate
	1501a	inlet orifices
15	1502	blocker plate
	1502A	orifices
	1504	wafer
	1506	heater
	1510	gap
20	1512	film
	1599	region
	1800	faceplate
	1802	inlet orifice
	1804	outlet slot
25	1806	intermediate orifice portion
	f 1	width
	L1	depth

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DESCRIPTION OF REFERENCE NUMERALS ON THE DRAWINGS (CONT'D)

f₃ width

L3 depth

f₂ width

L2 depth

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